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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

10/771,721

02/04/2004

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05/16/2006

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EXAMINER

LEWIS, TISHA D

ART UNIT

PAPER NUMBER

3681

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/771,721 | Applicant(s) TSBERGER ET AL. | |
| | Examiner TISHA D. LEWIS | Art Unit 3681 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-56 is/are pending in the application.
- 4a) Of the above claim(s) 32,33,36 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 28,29,31,35,37,38 and 40-56 is/are rejected.
- 7) ☒ Claim(s) 30 and 34 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

The following is a response to the amendment received on February 21, 2006 which has been entered.

Response to Amendment

Claims 28-56 are pending in the application. Claims 32, 33, 36 and 39 are withdrawn.

-The information disclosure statement filed on February 13, 2006 has been considered.

-The objection to claim 35 has been withdrawn due to applicant correcting a typographical error.

-The 112 2nd rejection of claim 45 has been withdrawn due to applicant deleting an indefinite term.

-The 102(b) and 103(a) rejections of claims 28-31, 34, 35, 37, 38 and 40-56 has been withdrawn due to applicant amending claim 28 with a limitation not disclosed in the prior art used in the rejection.

-The double patenting rejection of claims 28-31, 34, 35, 37, 38 and 40-53 has been withdrawn due to applicant filing a terminal disclaimer which has been approved.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28, 29, 35, 40, 41, 51 and 54 are rejected under 35 U.S.C. 102(b) as being unpatentable by Henzler et al ('789). Henzler discloses a six gear transmission having a single clutch (column 4, line 43) connected with a drive shaft (via 12) of an engine and a single input shaft (11), two countershafts (13, 14) supporting idler wheels (30-33, 40 and 42), the input shaft supporting fixed wheels (20-23) in tooth contact with the idler wheels, coupling devices (35, 36, 44 and 45) non-rotatably and axially moveably supported on the countershafts by setting devices, one output gear (43) fastened on a countershaft (14) in tooth contact with toothing (50) on a differential transmission (51), two gear positions (i.e., 3-5 or 4-6) are disposed in a shifting gate and associated with two different couplings, two of the fixed wheels (22, 23) are in tooth contact with two idler wheels (32, 41, 33, 42) on each countershaft, a highest gear (6) and a second highest gear (5) idler wheels are situated on the first countershaft (13), a third highest gear (4) and a fourth highest gear (3) are situated on the second countershaft (14), two of the output gears (34, 43) are situated on ends of the countershafts towards the single clutch, the coupling devices are shifting sets having axially moveable sliding sleeves, the differential is a power divider transmission and the setting devices can be servo assisted via a mechanical conversion device (operator shifting).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31, 37, 38, 42 and 43 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Henzler et al. Henzler et al disclose a sequence for a gear arrangement of the transmission and having specific gears disposed on specific countershafts, but not the claimed sequence or gear assembly.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the gear arrangement of Henzler et al according to the claimed sequence and assembly because re-arranging the gear positions between countershafts would not modify the operation of the transmissions (In re Japikse, 181 F.2d 1019, 86 USPQ 70, CCPA 1950).

Claims 44 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henzler et al in view of Pels et al ('247). Henzler et al discloses that a clutch is used to connect an engine and a transmission, but does not disclose the type of clutch.

Pels et al discloses a starting clutch and shifting clutch that can be used to connect an engine and a transmission.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the clutch of Henzler et al as a multiplate or powershift or starting clutch in view of Pels et al to provide selective connection between the engine and transmission when needed.

Claims 45, 46 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henzler et al in view of Kobayashi ('168). Henzler et al disclose a transmission, but does not disclose a torque converter and a damper.

Kobayashi discloses a transmission having two countershafts for providing at least six speeds and a torque converter with a damper arrangement (Figure 9).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Henzler et al with a torque converter to provide a spread between the gear ratios and with a damper to reduce vibration between the engine and transmission in view of Kobayashi.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henzler et al in view of Hall, III ('705). Henzler et al disclose a transmission, but does not disclose a brake.

Hall, III discloses a transmission having two countershafts for providing at least six speeds wherein the countershafts are provided with brake mechanisms (74, 76).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Henzler et al with a brake mechanism on the countershafts in view of Hall, III to provide synchronization between the input shaft and output shaft speeds before a gear shift change.

Claims 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henzler et al in view of Pels et al ('247). Henzler et al disclose a transmission, but does not disclose an electric generator.

Pels et al discloses a transmission having two countershafts for providing at least six speeds wherein an electric generator (10) (which can also be considered an auxiliary) is provided on one of the countershafts or the input shaft to be driven from a clutch side.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Fisher and Heinzl et al with an electric generator in view of Pels et al to provide assistance torque to the engine.

Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henzler et al in view of Smith ('483). Henzler et al disclose a transmission, but does not disclose the actual arrangement of the setting devices.

Smith discloses a transmission having two countershafts for providing at least six speeds wherein coupling devices are actuated by servo piston-cylinder systems hydraulically (Figures 3a-10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Henzler et al with servo piston systems to actuate couplings in view of Smith to provide semi-automatic control of transmission.

Allowable Subject Matter

Claims 30 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-Thur 6 AM TO 2:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Tdl
May 11, 2006


TISHA LEWIS
PRIMARY EXAMINER
Au 3681 5/11/06